



User Manual

Interleukin-11 (IL-11) (Murine)

Cat. No. MEILP-11011



Description:

Interleukin-11 (IL11) is a pleiotropic cytokine that was originally detected in the conditioned medium of an IL-1 α -stimulated primate bone marrow stromal cell line (PU-34) as a mitogen for the IL-6-responsive murine plasmacytoma cell line T11. IL-11 contains no cysteine residues or potential glycosylation sites. IL-11 has multiple effects on both hematopoietic and nonhematopoietic cells. Many of the biological effects described for IL-11 overlap those for IL-6. In vitro, IL-11 can synergize with IL-3, IL-4 and SCF to shorten the G0 period of early hematopoietic progenitors. IL-11 also enhances the IL-3-dependent megakaryocyte colony formation. IL-11 has been found to stimulate the T cell dependent development of specific immunoglobulin-secreting B cell.

Source:

Escherichia coli

Unit:

2 μ g

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.

Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term

storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Molecular Weight:

Approximately 19.1 kDa, a single non-glycosylated polypeptide chain containing 179 amino acids.

Endotoxin:

Less than 1 EU/μg of IL-11 as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by a cell proliferation assay using murine T11 cells is less than 2 ng/mL, corresponding to a specific activity of $> 5.0 \times 10^5$ IU/mg.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

MPGPPAGSPR VSSDPRADLD SAVLLTRSLI ADTRQLAAQM
RDKFPADGDHSLDSLPTLAM SAGTLGSLQL PGVLTRLRVD LMSYLRHVQW
LRRAGGPSLKTLEPELGALQ ARLERLLRRL QLLMSRLALP QAAPDQPVIP

LGPPASAWGSIRAAHAILGG LHLTLDWAVR GLLLLKTRL

Purity:

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

Cyagen Biosciences reserves all rights on the technical documents of its culture products. No part of this document may be reproduced or adapted for other purposes without written permission from Cyagen Biosciences.